

**P A T E N T**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re:	Sean McFerran	Confirmation No.: 7830
Serial No.:	10/667,056	Examiner: Phillip A. Gray
Filing Date:	September 22, 2003	Group Art Unit: 3767
Docket No.:	1001.1708101	Customer No.: 28075
For:	MICROCATHETER WITH SLEEVED GUIDEWIRE PORT	

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REPLY BRIEF UNDER 37 C.F.R. § 41.41**

**CERTIFICATE FOR ELECTRONIC TRANSMISSION:**

The undersigned hereby certifies that this paper or papers, as described herein, are being electronically transmitted to the U.S. Patent and Trademark Office on this 7th day of December 2007.

By   
Kathleen L. Boekley

Dear Sir:

Pursuant to 37 C.F.R. § 41.41, Appellant hereby submits this Reply Brief in reply to the Examiner's Answer of October 9, 2007. Permission is hereby granted to charge or credit Deposit Account No. 50-0413 for any errors in fee calculation.

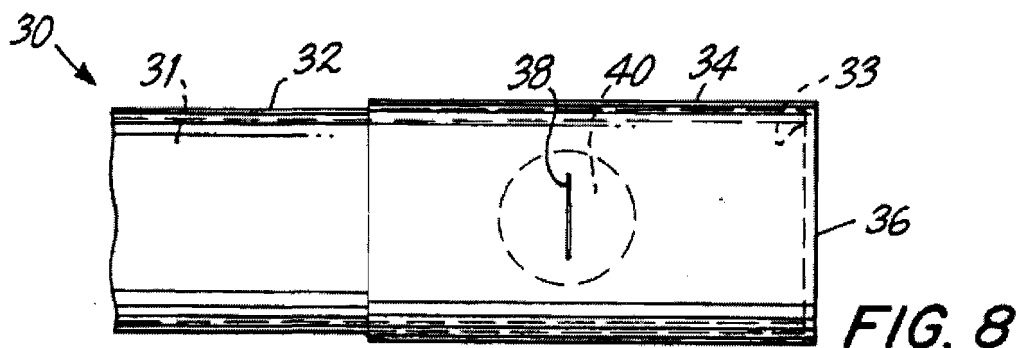
## REMARKS

The following remarks are submitted after carefully reviewing the Examiner's remarks prepared in the Examiner's Answer.

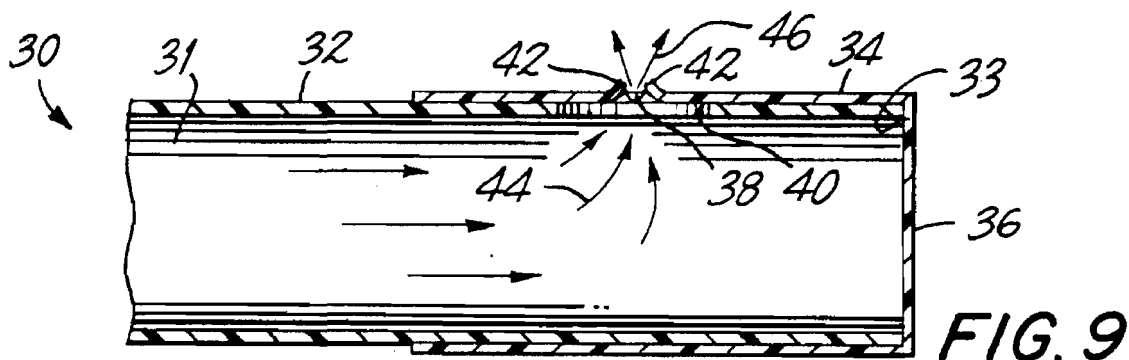
These arguments are not intended to be a complete argument by itself. Rather, it is limited to responding to the points raised by the Examiner in the Examiner's Answer in the order raised by the Examiner and should therefore be read together with the Appeal Brief.

### ***Remarks for First Argument***

In responding to Appellant's first argument on page 4 of the Examiner's Answer, the Examiner maintains that Alchas does indeed disclose an elongate guidewire port. The Examiner agrees that the port 40 as shown from a top view, as in Figure 8 below, is circular and therefore not elongate.



But the Examiner argues that because the guidewire port appears to be elongate in a cross-sectional view, as in Figure 9 below, that the port is elongate.



This position is clearly erroneous. The port is not the rectangular cross-section of Figure 9 but a circular opening through catheter 32 as most clearly seen in top views such as that of

Figure 8. (Would the Examiner also say, based on Figure 9, that port 40 is rectangular?) Figures of an object are not the object. Figures of an object are merely used in understanding the geometry of an object. And the geometry of port 40, as the Examiner has agreed, is circular. Appellants cannot believe that anyone of skill in the art would agree with the Examiner's contention that port 40 has more length than width. People of skill in the art would understand length and width to be those dimensions shown in Figure 8 and pertinent to the area of port 40 and would understand the length and width of a circular port to be equal.

The Examiner, relying on the other definition found for elongate, also argues that port 40 is elongate because it is "made longer, extended" than slit 38. However, this definition makes sense only if the implied comparison is the normal condition or if there is an explicit comparison. For example, one might say that a particular brand of shoe tends to be more elongate for a given shoe size. Choosing an arbitrary component to make a comparison with is not in accord with the definition. Further, when the phrase in question is "an elongate guidewire port," there seems to be no basis whatsoever for using this definition. Because there is no comparison present in the claim language, expressed or implied, one of skill in the art would understand elongate to have the meaning of having greater length than width.

If one uses elongate in the sense that those of skill in the art use the term, it is clear that port 40 of Alchas is not elongate and that the catheter of the claims is quite easily distinguished from those of Alchas.

***Remarks for Second Argument***

The Examiner argues, correctly, that the claim language does not preclude a double-slit valve. However, there is no motivation to incorporate the double slit valve of Person into the catheter of Alchas. The Examiner argues, in the September 12, 2006 Office Action, that motivation for the modification is that "the angled slit as described by Person for opening to increased pressure in the lumen to permit the infusion of fluids from the lumen of the catheter into the vessel in which the catheter is positioned. However, the unmodified catheter of Alchas already provides this functionality: "the valve opens readily to the presence of medication being fed into the catheter for introduction into the blood vessel of the patient." Alchas at column 3, lines 24-26. And it does this with a simple, straight single slit rather than the more elaborate double slit configuration of Person. The double slit of Person is not a neutral alternative

configuration but a configuration that is inferior because it adds complexity without adding functionality.

The Examiner points out, correctly, that Person discloses single slit valves and that these valves are at an angle to the longitudinal axis of the tube and cites these valves for the first time. However, Person does not disclose that these slits are at an angle to the tube wall as claimed. In contrast, claim 13 recites “the polymer sheath including a passage comprising an angled slit extending radially through the polymer sheath at an angle such that the slit has a depth that is greater than a thickness of the polymer sheath, the slit disposed parallel to a longitudinal axis.”

The Examiner argues that Person does not in fact teach away from orienting a valve parallel to the longitudinal axis of the catheter citing language in Person saying that “In each of the embodiments it is preferred that the valves are positioned at an angle to the longitudinal axis of the catheter in an area of reduced thickness to increase the size of the opening for the ingress and egress of fluids.” Person at column 2, lines 30-34. The Examiner’s position is that “it is ‘preferred’ that the valves are positioned at an angle to the longitudinal axis.” However, the entire sentence refers to valves “positioned at an angle to the longitudinal axis of the catheter in an area of reduced thickness.” Given the strong language describing that angular position of the valves, the language describing the operation of such valves as dependent upon the valve being at an angle, and that not all described embodiments have a valve in a reduced thickness portion of the catheter, such preference is undoubtedly in regard to locating the valve in an area of reduced thickness.

For example, the summary, with regard to the first embodiment, says absolutely that “the valve *is* oriented at an angle to the longitudinal axis of the tube” but uses the softer language “in one preferred embodiment...at least one valve is positioned solely in the portion of reduced thickness” when describing the thickness feature. Person at column 2, lines 4-12. Equally absolute and unambiguous language is used the second time the angular position of the valve is discussed in the summary: “the slit valves comprise at least one pair of slits which are parallel to each other but are positioned at angle to the longitudinal axis of the tube.” Column 2, lines 23-26.

The operation of a valve is described in the first whole paragraph of column 4:

FIGS. 1 and 2 show the valve 22 oriented at an angle to the longitudinal axis of catheter 10. Thus, valve 22 lies in a plane oriented at an angle to the

longitudinal axis. Positioning the valve 22 at an angle within the reduced wall thickness results in a larger opening for the ingress and egress of fluids. When suction is applied, the reduced thickness wall will want to collapse so it will twist. Thus the slit opens into an eye-shaped opening as shown for example in FIG. 18A. A preferred angular orientation of valve 22 relative to the longitudinal axis is 30 degrees, although differing angles, and particularly greater angles, will provide the desired advantage.

As described by Person, the valve operates by twisting and it is the positioning of the valve at an angle with regard to the longitudinal axis that permits twisting to occur.

Aside from the single ambiguous sentence cited by the Examiner, Person does not, so far as Appellants can find, describe the angle of the valves with respect to the longitudinal axis with non-absolute language. This is not mere style. Person does use such language with respect to other features. See, for example, column 5, lines 58-60. In contrast, the feature of the reduced thickness portion of the catheter is not even found in some embodiments (that of Figure 15, for example).

Appellants respectfully maintain, therefore, that Person does in fact teach away from orienting its valve parallel to the longitudinal axis of the catheter.

### **Conclusion**

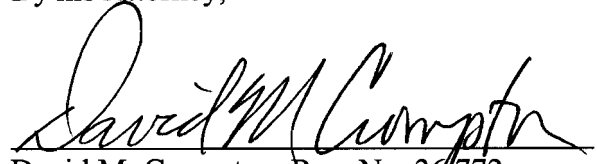
For the reasons stated above and in the Appeal Brief, claims 13 and 15-17 are believed to be allowable over Alchas in view of Person et al., and the Examiner's rejections of these claims under 35 U.S.C. § 103(a) should be overruled.

Respectfully submitted,

Sean McFerran

By his Attorney,

Date: 12/7/07



David M. Crompton, Reg. No. 36,772  
CROMPTON, SEAGER & TUTTLE, LLC  
1221 Nicollet Avenue, Suite 800  
Minneapolis, MN 55403-2420  
Telephone: (612) 677-9050  
Facsimile: (612) 359-9349